



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

GAF

1361 Alps Road
Wayne, NJ 07470

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF Conventional Built-Up Roof Systems for Wood Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 13-0424.09 and consists of pages 1 through 16.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 13-1022.15
Expiration Date: 11/04/18
Approval Date: 11/06/14
Page 1 of 16

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR
Material: Fiberglass
Deck Type: Wood
Maximum Design Pressure: -75 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
GAFGlas® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
GAFGlas® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated, fiberglass base sheet.
GAFGlas® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGlas® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGlas® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGlas® EnergyCap™ BUR Mineral Surface Cap Sheet	39.37" (1 meter) wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules with factory applied EnergyCote™
GAFGlas® Stratavent® Eliminator™ Perforated Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	Fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating with factory perforations.
GAFGlas® Stratavent® Eliminator™ Nailable Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	A nailable, fiberglass base sheet impregnated and coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
Ruberoid® SBS Heat-Weld™ Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-Woven Polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® SBS Heat-Weld™ 25	39.37" (1 meter) Wide	ASTM D6164	Non-Woven Polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® 20	39.37" (1 meter) Wide	ASTM D6163	SBS modified asphalt base sheet reinforce with a glass fiber mat.
Ruberoid® Mop Smooth	39.37" (1 meter) wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.



NOA No.: 13-1022.15
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Page 2 of 16

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:**TABLE 1**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
FireOut™ Fire Barrier Coating	5, 55 gallons	Proprietary	Low VOC, water based fire barrier coating.
VersaShield® Fire Resistant Roof Deck Protection	350 sq. ft. roll	ASTM D226	Non-Asphaltic Fiberglass-Based Underlayment.
Topcoat® Surface Seal SB	5 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase a roof's reflectivity.

APPROVED INSULATIONS:**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Perlite Roof Insulation	Perlite insulation board.	GAF
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF
EnergyGuard™ RA Composite Polyiso Insulation	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation	GAF
Securock® Gypsum-Fiber Roof Board	Gypsum roof board	United States Gypsum Corp.
Structodek® High Density Fiber Board	High density fiber board	Blue Ridge Fiberboard, Inc.
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Drill-Tec™ #12 Fastener	Insulation fastener for steel, wood & concrete decks.	various	GAF
2.	Drill-Tec™ #14 Fastener	Insulation fastener for steel, wood & concrete decks.	various	GAF
3.	Drill-Tec™ XHD Fastener	Carbon steel extra heavy duty fastener used in steel decks.	Various	GAF
4.	Drill-Tec™ ASAP 3S	Drill-Tec™ #12 Fastener with Drill-Tec™ 3" Standard Steel Plate	Various	GAF
5.	Drill-Tec™ 3" Steel Plate	Round galvalume stress plate used with Drill-Tec™ fasteners.	3" round	GAF
6.	Drill-Tec™ 3" Standard Steel Plate	Round galvalume plated steel stress plate with reinforced ribs for use with Drill-Tec™ fasteners.	3" round	GAF
7.	Drill-Tec™ AccuTrac® Flat Plate	AZ-SS aluminized steel plate for use with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ #15 Fastener.	3" square	GAF
8.	Drill-Tec™ AccuTrac® Recessed Plate	Galvalume Steel plate for use with Drill-Tec™ fasteners.	3" square	GAF

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corp.	J.I. 2B8A4.AM	4470	07/02/97
	J.I. 3B9Q1.AM	4470	01/08/98
	J.I. 0D0A8.AM	4470	07/09/99
	J.I. 0D1A8.AM	4470	07/29/94
	J.I. 0Y9Q5.AM	4470	04/01/98
UL LLC PRI Construction Materials Technologies, LLC	3029832	4470	05/11/07
	R1306	UL 790	07/22/13
	GAF-012-02-02	ASTM D4977	11/06/01
	GAF-020-02-01	ASTM D4977	02/01/02
	GAF-082-02-01	ASTM D6083	05/07/06
	GAF-084-02-01	ASTM D6083	05/09/06
	GAF-270-02-02	ASTM D226	11/15/10
	GAF-276-02-01Rev	ASTM D6083	12/16/10
	GAF-276-02-02	ASTM D226	11/15/10
	GAF-306-02-01	ASTM E96	07/07/11
	GAF-314-02-01	ASTM D2178	08/23/11
	GAF-315-02-01	ASTM D2178	08/23/11
	GAF-369-02-01	ASTM C1289	10/22/12
	GAF-417-02-01	ASTM C1289	05/28/13
	GAF-464-02-01	ASTM C1289	10/22/12
	GAF-499-02-01	ASTM D6083	03/12/14
	GAF-500-02-01	ASTM D6083	03/12/14
IRT of S. Fl.	02-005	TAS 114	01/18/02
	02-014	TAS 114	03/22/02
Trinity ERD	G30250.02.10-3-R1	ASTM D3909	11/26/12
	G31360.03.10	ASTM D6164	03/31/10
	G33470.01.11	ASTM D6164	11/16/11
	G34140.04.11-2	ASTM D6163	04/25/11
	G34140.04.11-4	ASTM D6401	04/25/11
	G34140.04.11-5	ASTM D4897	04/25/11
	G34140.04.11-5-R1	ASTM D4897	10/18/13
	G40630.01.14-2A-1	ASTM D6164	01/07/14
	G43610.01.14	ASTM D3909	01/22/14
	G6850.08.07-1	ASTM D3909	08/13/07
	G30250.02.10-3-R1	ASTM D3909	11/26/12



APPROVED ASSEMBLIES

Membrane Type:	BUR
Deck Type II:	Wood, Insulated
Deck Description:	19/32" or greater plywood or wood plank
System Type A:	Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt.

All General and System Limitations shall apply.

Fire Barrier: (optional)	FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection or Securock® Gypsum Fiber Roof Board.
Anchor sheet:	GAFGlas® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® Heat-Weld™ 25 base sheet mechanically fastened as described below;
Fastening Options:	<p>GAFGlas® Ply 4, GAFGLAS® Flex Ply™ 6, GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the lap staggered and in two rows 12" o.c. in the field. <i>(Maximum Design Pressure –45 psf. See General Limitation #7)</i></p> <p>GAFGlas® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 3 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 12" o.c. in the field of the sheet. <i>(Maximum Design Pressure –45 psf. See General Limitation #7)</i></p> <p>GAFGlas® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the 4" lap staggered and in two rows 9" o.c. in the field. <i>(Maximum Design Pressure –52.5 psf. See General Limitation #7)</i></p> <p>GAFGlas® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet attached to deck with approved 1¼" annular ring shank nails and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane. <i>(Maximum Design Pressure –60 psf. See General Limitation #7)</i></p> <p>GAFGlas® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet. <i>(Maximum Design Pressure –60 psf. See General Limitation #7)</i></p> <p>Any of above anchor sheets attached to deck approved annular ring shank nails and 3" inverted Drill-Tec™ insulation plates at a fastener spacing of 9" o.c. at the 4" lap staggered in two rows 9" in the field. <i>(Maximum Design Pressure –60 psf. See General Limitation #7)</i></p>

Fastening Options: GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and 3" Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 8" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet.

(Maximum Design Pressure –75 psf. See General Limitation #7)

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1" thick	N/A	N/A
EnergyGuard™ Perlite Recover Board Minimum ½" thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick	N/A	N/A

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all isocyanurate applications.

Base Sheet: Optional) Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet, Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq; (see General Limitation #4).

Ply Sheet: One or more plies GAFGLAS® PLY 4, GAFGLAS® Flex Ply™ 6 sheet or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: See Fastening Options.

Membrane Type:	BUR
Deck Type II:	Wood, Insulated
Deck Description:	19/32" or greater plywood or wood plank
System Type B:	Optional base sheet laid dry; base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick	1, 2, 3 or 4	1:3 ft²
EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick	1, 2, 3 or 4	1:3 ft²
EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5 thick	3	1:3 ft²
EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick	1, 2, 7 or 8	1:2 ft²
Structodek® High Density Fiberboard Minimum 1" thick	1, 2, 7 or 8	1:4 ft²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details). GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all isocyanurate applications.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Any of the insulations listed for Base Layer, above.	N/A	N/A
Structodek® High Density Fiberboard, EnergyGuard™ Perlite Recover Board Minimum ½" thick	N/A	N/A

Note: Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Fire Barrier: (optional)	FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection or Securock™ Gypsum Fiber Roof Board.
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- Base Sheet:** (Optional) Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry, Ruberoid® Mop Smooth or Ruberoid® 20 directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. (See General Limitation #4).
- Ply Sheet:** Two or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. (See specification number for appropriate number of plies).
- Cap Sheet:** (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. (See GAF application instructions for approved method of installation).
- Surfacing:** **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**
1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
 2. Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
- Maximum Design Pressure:** -45 psf. (See General Limitation #7)

Membrane Type:	BUR
Deck Type II:	Wood, Insulated
Deck Description:	19/32" or greater plywood or wood plank
System Type C:	One or more layers of insulation simultaneously attached; Base layer optional.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick	N/A	N/A
EnergyGuard™ Polyiso Insulation Minimum 1.4" thick	N/A	N/A
EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick	N/A	N/A
EnergyGuard™ Perlite Recover Board Minimum ¾" thick	N/A	N/A
Structodek® High Density Fiber Board Minimum 1" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all isocyanurate applications.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick	1, 2, 3 or 4	1:3 ft ²
EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick	1, 2 or 3	1:3 ft ²
EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5 thick	3	1:3 ft ²
EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick	1, 2, 7 or 8	1:2 ft ²
Structodek® High Density Fiber Board Minimum 1" thick	1, 2, 7 or 8	1:4 ft ²



Note: Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate applications.

- Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection or (optional) Securock™ Gypsum Fiber Roof Board.
- Base Sheet:** (Optional) Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry, Ruberoid® Mop Smooth or Ruberoid® 20 directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. If base sheet is applied directly to polyisocyanurate insulation only a spot or strip mopped application as detailed in this approval the use of an overlay board is approved; see General Limitation #4.
- Ply Sheet:** Two or more plies of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 ply sheet or GAFGLAS® #80 Ultima™ Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Cap Sheet:** (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing:** **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**
1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
 2. Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
- Maximum Design Pressure:** -45 psf. (See General Limitation #7)

Membrane Type: BUR

Deck Type II: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

System Type D: Insulation and Base sheet simultaneously

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick	N/A	N/A
Structodek® High Density Fiber Board Minimum 1" thick	N/A	N/A

Note: Insulation shall have preliminary attachment, prior to the installation of the base sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation, optional thermal barrier (when present) and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Fire Barrier: FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection or (optional) Securock™ Gypsum Fiber Roof Board.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet or Ruberoid® 20 base sheet applied over the loose laid insulation with 2" side laps mechanically fastened as described below;

Fastening Options: Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate is installed through the base sheet and insulation in 3 rows 12" o.c. One row is in the 2" side lap. The other rows are equally spaced approximately 12" o.c. in the field of the sheet.
(Maximum Design Pressure –45 psf. See General Limitation #7)

Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate is installed through the base sheet and insulation in 4 rows 8" o.c. One row is in the 2" side lap. The other 3 rows are equally spaced approximately 9" o.c. in the field of the sheet.
(Maximum Design Pressure –75 psf. See General Limitation #7)

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet attached to deck with approved annular ring shank nails with a minimum embedment of 1" into the wood substrate and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane.
(Maximum Design Pressure –60 psf. See General Limitation #7)

**Fastening Options:
(Continued)**

Drill-Tec™ #12 Fastener and Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate in 4 rows 12" o.c. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet.

(Maximum Design Pressure –60 psf. See General Limitation #7)

Ply Sheet:

One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet:

(Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:

Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq.
2. Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

**Maximum Design
Pressure:**

See Fastening Options

Membrane Type: BUR

Deck Type 1: Wood, Non-insulated

Deck Description: 19/32" or greater plywood or wood plank decks

System Type E: Base sheet mechanically fastened.

All General and System Limitations shall apply.

Fire Barrier: FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection or
(optional) Securock™ Gypsum Fiber Roof Board.

Base sheet: GAFGLAS® #80 Ultima™ Base Sheet, Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 base sheet mechanically fastened to deck as described below;

Fastening Options: GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the lap staggered and in two rows 12" o.c. in the field.
(Maximum Design Pressure –45 psf. See General Limitation #7)

GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener or Drill-Tec™ #14 and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 3 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 12" o.c. in the field of the sheet.
(Maximum Design Pressure –45 psf. See General Limitation #7)

GAFGLAS® Flex Ply™ 6, GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the 4" lap staggered and in two rows 9" o.c. in the field.
(Maximum Design Pressure –52.5 psf. See General Limitation #7)

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet attached to deck with approved 1¼" annular ring shank nails and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane.
(Maximum Design Pressure –60 psf. See General Limitation #7)

GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet.
(Maximum Design Pressure –60 psf. See General Limitation #7)

Any of above Base sheets attached to deck approved annular ring shank nails and 3" inverted Drill-Tec™ insulation plates at a fastener spacing of 9" o.c. at the 4" lap staggered in two rows 9" in the field.
(Maximum Design Pressure –60 psf. See General Limitation #7)

Fastening Options: (Continued)	<p>GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 8” o.c. in 4 rows. One row is in the 2” side lap. The other rows are equally spaced approximately 9” o.c. in the field of the sheet.</p> <p><i>(Maximum Design Pressure –75 psf. See General Limitation #7)</i></p>
Ply Sheet:	One or more plies of GAFGLAS® Ply 4 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Cap Sheet:	(Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	<p>Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.</p> <ol style="list-style-type: none"> 1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. 2. Topcoat® Surface Seal SB applied at 1to 1.5 gal./sq.
Maximum Design Pressure:	See Fastening Options

WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with GAFGLAS® Ply 4 and GAFGLAS® Flex Ply™ 6 when used as a mechanically fastened base or anchor sheet.
2. Minimum ¼" DensDeck™ Roof Board or ½" Type X gypsum board is acceptable to be installed directly over the wood deck.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 13-1022.15
Expiration Date: 11/04/18
Approval Date: 11/06/14
Page 16 of 16